

GIVEN: WKRE - RECTANGLE
 $\overline{CR} = 10$;

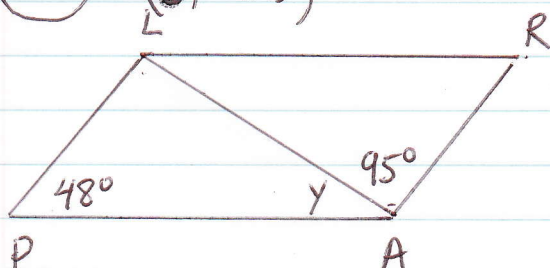
FIND: \overline{WE} - ?

ACCORDING TO C-52, THE DIAGONALS OF A RECTANGLE ARE CONGRUENT AND BISECT EACH OTHER

$$\overline{KC} \cong \overline{CR} \cong \overline{WC} \cong \overline{CE} = 10$$

$$\overline{WE} = \overline{WC} + \overline{CE} = 10 + 10 = 20 \quad ; \quad \underline{\overline{WE} = 20}$$

#12 (6 points)



GIVEN: PLRA - PARALLELOGRAM

$$m\angle P = 48^\circ$$

$$m\angle LAR = 95^\circ$$

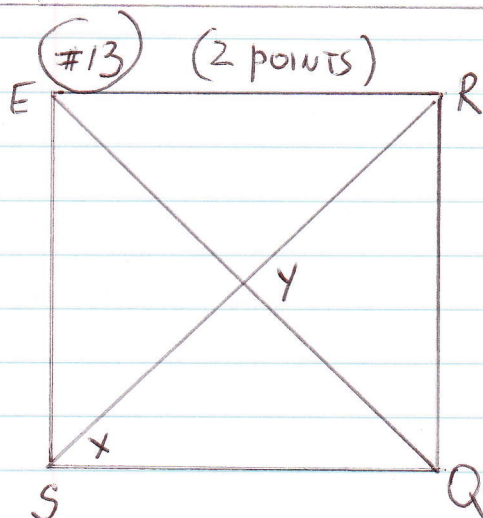
FIND: $m\angle LAP = y$

$m\angle P \cong m\angle R$ OPPOSITE ANGLES IN PARALLELOGRAM ARE CONGRUENT

$$m\angle L = m\angle A = \frac{360 - 48 \cdot 2}{2} = 132^\circ$$

$$m\angle A = 132^\circ - 95^\circ = 37^\circ$$

$$\underline{m\angle A = 37^\circ}$$



GIVEN: SERQ - SQUARE

FIND: $m\angle Y$ - ? $m\angle X$ - ?

ACCORDING TO CONJECTURE C-53, THE DIAGONALS OF A SQUARE ARE PERPENDICULAR AND BIS

$$m\angle Y = 90^\circ$$

THE DIAGONALS OF A SQUARE BISECT ANGLES (90°)

$$m\angle X = \frac{90^\circ}{2} = 45^\circ$$

$$\underline{m\angle X = 45^\circ}$$